



<223> Amino acid 7 is Xaa wherein Xaa = Gln or Lys.

<220>

<221> PEPTIDE

<222> (11)

<223> Amino acid 11 is Xaa wherein Xaa = Asn or Asp.

<220>

<221> PEPTIDE

<222> (17)..(25)

<223> Amino acids 17-25 are Xaa wherein Xaa = Gly, Pro, Pro, Val, Ser, Cys, Ile, Lys, Arg

<220>

<221> MOD\_RES

<222> (25)

<223> AMIDATION

<220>

<223> Description of Artificial Sequence: of natural or artificial origin, corresponding to modification of the sequence consisting of aa 16-40 in human lactoferrin

<400> 1

Xaa	Xaa	Thr	Lys	Xaa	Phe	Xaa	Trp	Gln	Arg	Xaa	Met	Arg	Lys	Val	Arg
1				5				10						15	

Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa
			20					25	

<210> 2

<211> 25

<212> PRT

<213> Artificial Sequence

<220>

<221> MOD\_RES

<222> (1)

<223> ACETYLATION

<220>

<221> MOD\_RES

<222> (25)

<223> AMIDATION

<220>

<223> Description of Artificial Sequence: of natural or artificial origin, corresponding to a modification of the sequence consisting of amino acids 16-40 in human lactoferrin

<400> 2

Glu	Ala	Thr	Lys	Cys	Phe	Gln	Trp	Gln	Arg	Asn	Met	Arg	Lys	Val	Arg
1				5				10						15	

Gly	Pro	Pro	Val	Ser	Cys	Ile	Lys	Arg
			20					25

<210> 3  
 <211> 25  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <221> MOD\_RES  
 <222> (1)  
 <223> ACETYLTATION

<220>  
 <221> MOD\_RES  
 <222> (25)  
 <223> AMIDATION

<220>  
 <221> DISULFID  
 <222> (5)..(22)

<220>  
 <223> Description of Artificial Sequence: of natural or artificial origin, corresponding to a modification of the sequence consisting of amino acids 16-40 in human lactoferrin

<400> 3  
 Glu Ala Thr Lys Cys Phe Gln Trp Gln Arg Asn Met Arg Lys Val Arg  
           1                  5                  10                  15

Gly Pro Pro Val Ser Cys Ile Lys Arg  
                   20                  25

<210> 4  
 <211> 23  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <221> MOD\_RES  
 <222> (1)  
 <223> ACETYLTATION

<220>  
 <221> MOD\_RES  
 <222> (23)..(23)  
 <223> AMIDATION

<220>  
 <223> Description of Artificial Sequence: of natural or artificial origin, corresponding to a modification of the sequence consisting of amino acids 18-40 in human lactoferrin

<400> 4  
 Thr Lys Cys Phe Gln Trp Gln Arg Asn Met Arg Lys Val Arg Gly Pro  
           1                  5                  10                  15

Pro Val Ser Cys Ile Lys Arg

20

<210> 5  
 <211> 23  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <221> MOD\_RES  
 <222> (1)  
 <223> ACETYLATION

<220>  
 <221> MOD\_RES  
 <222> (23)  
 <223> AMIDATION

<220>  
 <221> DISULFID  
 <222> (3)..(20)

<220>  
 <223> Description of Artificial Sequence: of natural or  
 artificial origin, corresponding to a modification  
 of the sequence consisting of amino acids 18-40 in  
 human lactoferrin

<400> 5  
 Thr Lys Cys Phe Gln Trp Gln Arg Asn Met Arg Lys Val Arg Gly Pro  
 1 5 10 15

Pro Val Ser Cys Ile Lys Arg  
 20

<210> 6  
 <211> 14  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <221> MOD\_RES  
 <222> (1)  
 <223> ACETYLATION

<220>  
 <221> MOD\_RES  
 <222> (14)  
 <223> AMIDATION

<220>  
 <223> Description of Artificial Sequence: of natural or  
 artificial origin, corresponding to a modification  
 of the sequence consisting of amino acids 18-31 in  
 human lactoferrin

<400> 6

Thr Lys Ala Phe Lys Trp Gln Arg Asp Met Arg Lys Val Arg  
 1 5 10

<210> 7  
 <211> 14  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <221> MOD\_RES  
 <222> (1)  
 <223> ACETYLTATION

<220>  
 <221> MOD\_RES  
 <222> (14)  
 <223> AMIDATION

<220>  
 <221> BINDING  
 <222> (5)..(9)  
 <223> LACTAM

<220>  
 <223> Description of Artificial Sequence: of natural or artificial origin, corresponding to a modification of the sequence consisting of aa 18-31 in human lactoferrin; a lactam is formed between aa 5 and 9

<400> 7  
 Thr Lys Ala Phe Lys Trp Gln Arg Asp Met Arg Lys Val Arg  
 1 5 10

<210> 8  
 <211> 20  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Peptide of natural or artificial origin consisting of the amino acids in positions 12-31 of the protein human lactoferrin

<400> 8  
 Val Ser Gln Pro Glu Ala Thr Lys Cys Phe Gln Trp Gln Arg Asn Met  
 1 5 10 15

Arg Lys Val Arg  
 20

<210> 9  
 <211> 7  
 <212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Peptide of natural or artificial origin consisting of the amino acids in positions 12-18 of the protein human lactoferrin

<400> 9

Val Ser Gln Pro Glu Ala Thr  
1 5

<210> 10

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Peptide of natural or artificial origin consisting of the amino acids in positions 13-19 of the protein human lactoferrin

<400> 10

Ser Gln Pro Glu Ala Thr Lys  
1 5

<210> 11

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Peptide of natural or artificial origin consisting of the amino acids in positions 14-20 of the protein human lactoferrin

<400> 11

Gln Pro Glu Ala Thr Lys Cys  
1 5

<210> 12

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Peptide of natural or artificial origin consisting of the amino acids in positions 15-21 of the protein human lactoferrin

<400> 12

Pro Glu Ala Thr Lys Cys Phe  
1 5

<210> 13  
<211> 7  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Peptide of  
natural or artificial origin consisting of the  
amino acids in positions 16-22 of the protein  
human lactoferrin

<400> 13  
Glu Ala Thr Lys Cys Phe Gln  
1 5

<210> 14  
<211> 7  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Peptide of  
natural or artificial origin consisting of the  
amino acids in positions 17-23 of the protein  
human lactoferrin

<400> 14  
Ala Thr Lys Cys Phe Gln Trp  
1 5

<210> 15  
<211> 7  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Peptide of  
natural or artificial origin consisting of the  
amino acids in positions 18-24 of the protein  
human lactoferrin

<400> 15  
Thr Lys Cys Phe Gln Trp Gln  
1 5

<210> 16  
<211> 7  
<212> PRT  
<213> Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence: Peptide of natural or artificial origin consisting of the amino acids in positions 19-25 of the protein human lactoferrin

&lt;400&gt; 16

Lys Cys Phe Gln Trp Gln Arg  
1 5

&lt;210&gt; 17

&lt;211&gt; 7

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence: Peptide of natural or artificial origin consisting of the amino acids in positions 20-26 of the protein human lactoferrin

&lt;400&gt; 17

Cys Phe Gln Trp Gln Arg Asn  
1 5

&lt;210&gt; 18

&lt;211&gt; 7

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence: Peptide of natural or artificial origin consisting of the amino acids in positions 21-27 of the protein human lactoferrin

&lt;400&gt; 18

Phe Gln Trp Gln Arg Asn Met  
1 5

&lt;210&gt; 19

&lt;211&gt; 7

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence: Peptide of natural or artificial origin consisting of the amino acids in positions 22-28 of the protein human lactoferrin

&lt;400&gt; 19

Gln Trp Gln Arg Asn Met Arg  
1 5



<210> 20  
<211> 7  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Peptide of natural or artificial origin consisting of the amino acids in positions 23-29 of the protein human lactoferrin

<400> 20  
Trp Gln Arg Asn Met Arg Lys  
1 5

<210> 21  
<211> 7  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Peptide of natural or artificial origin consisting of the amino acids in positions 24-30 of the protein human lactoferrin

<400> 21  
Gln Arg Asn Met Arg Lys Val  
1 5

<210> 22  
<211> 7  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Peptide of natural or artificial origin consisting of the amino acids in positions 25-31 of the protein human lactoferrin

<400> 22  
Arg Asn Met Arg Lys Val Arg  
1 5

<210> 23  
<211> 8  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Peptide of

natural or artificial origin consisting of the  
amino acids in positions 16-23 of the protein  
human lactoferrin

<400> 23

Glu Ala Thr Lys Cys Phe Gln Trp  
1 5

<210> 24

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Peptide of  
natural or artificial origin consisting of the  
amino acids in positions 16-24 of the protein  
human lactoferrin

<400> 24

Glu Ala Thr Lys Cys Phe Gln Trp Gln  
1 5

<210> 25

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Peptide of  
natural or artificial origin consisting of the  
amino acids in positions 16-25 of the protein  
human lactoferrin

<400> 25

Glu Ala Thr Lys Cys Phe Gln Trp Gln Arg  
1 5 10

<210> 26

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Peptide of  
natural or artificial origin consisting of the  
amino acids in positions 16-26 of the protein  
human lactoferrin

<400> 26

Glu Ala Thr Lys Cys Phe Gln Trp Gln Arg Asn  
1 5 10

<210> 27  
 <211> 12  
 <212> PRT  
 <213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Peptide of natural or artificial origin consisting of the amino acids in positions 16-27 of the protein human lactoferrin

<400> 27

Glu Ala Thr Lys Cys Phe Gln Trp Gln Arg Asn Met  
 1 5 10

<210> 28  
 <211> 13  
 <212> PRT  
 <213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Peptide of natural or artificial origin consisting of the amino acids in positions 16-28 of the protein human lactoferrin

<400> 28

Glu Ala Thr Lys Cys Phe Gln Trp Gln Arg Asn Met Arg  
 1 5 10

<210> 29  
 <211> 14  
 <212> PRT  
 <213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Peptide of natural or artificial origin consisting of the amino acids in positions 16-29 of the protein human lactoferrin

<400> 29

Glu Ala Thr Lys Cys Phe Gln Trp Gln Arg Asn Met Arg Lys  
 1 5 10

<210> 30  
 <211> 15  
 <212> PRT  
 <213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Peptide of natural or artificial origin consisting of the amino acids in positions 16-30 of the protein

## human lactoferrin

&lt;400&gt; 30

Glu Ala Thr Lys Cys Phe Gln Trp Gln Arg Asn Met Arg Lys Val  
 1 5 10 15

&lt;210&gt; 31

&lt;211&gt; 16

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence: Peptide of  
 natural or artificial origin consisting of the  
 amino acids in positions 16-31 of the protein  
 human lactoferrin

&lt;400&gt; 31

Glu Ala Thr Lys Cys Phe Gln Trp Gln Arg Asn Met Arg Lys Val Arg  
 1 5 10 15

&lt;210&gt; 32

&lt;211&gt; 19

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence: Peptide of  
 natural or artificial origin consisting of the  
 amino acids in positions 13-31 of the protein  
 human lactoferrin

&lt;400&gt; 32

Ser Gln Pro Glu Ala Thr Lys Cys Phe Gln Trp Gln Arg Asn Met Arg  
 1 5 10 15

Lys Val Arg

&lt;210&gt; 33

&lt;211&gt; 18

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence: Peptide of  
 natural or artificial origin consisting of the  
 amino acids in positions 14-31 of the protein  
 human lactoferrin

&lt;400&gt; 33

Gln Pro Glu Ala Thr Lys Cys Phe Gln Trp Gln Arg Asn Met Arg Lys  
 1 5 10 15

Val Arg

<210> 34  
 <211> 17  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Peptide of natural or artificial origin consisting of the amino acids in positions 15-31 of the protein human lactoferrin

<400> 34  
 Pro Glu Ala Thr Lys Cys Phe Gln Trp Gln Arg Asn Met Arg Lys Val  
           1                  5                  10                  15

Arg

<210> 35  
 <211> 15  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Peptide of natural or artificial origin consisting of the amino acids in positions 17-31 of the protein human lactoferrin!

<400> 35  
 Ala Thr Lys Cys Phe Gln Trp Gln Arg Asn Met Arg Lys Val Arg  
           1                  5                  10                  15

<210> 36  
 <211> 14  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: Peptide of natural or artificial origin consisting of the amino acids in positions 18-31 of the protein human lactoferrin

<400> 36  
 Thr Lys Cys Phe Gln Trp Gln Arg Asn Met Arg Lys Val Arg  
           1                  5                  10

<210> 37

<211> 13  
 <212> PRT  
 <213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Peptide of natural or artificial origin consisting of the amino acids in positions 19-31 of the protein human lactoferrin

<400> 37

Lys Cys Phe Gln Trp Gln Arg Asn Met Arg Lys Val Arg  
 1 5 10

<210> 38

<211> 12

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Peptide of natural or artificial origin consisting of the amino acids in positions 20-31 of the protein human lactoferrin

<400> 38

Cys Phe Gln Trp Gln Arg Asn Met Arg Lys Val Arg  
 1 5 10

<210> 39

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Peptide of natural or artificial origin consisting of the amino acids in positions 21-31 of the protein human lactoferrin

<400> 39

Phe Gln Trp Gln Arg Asn Met Arg Lys Val Arg  
 1 5 10

<210> 40

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Peptide of natural or artificial origin consisting of the amino acids in positions 22-31 of the protein human lactoferrin

&lt;400&gt; 40

Gln Trp Gln Arg Asn Met Arg Lys Val Arg  
 1 5 10

&lt;210&gt; 41

&lt;211&gt; 9

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence: Peptide of  
 natural or artificial origin consisting of the  
 amino acids in positions 23-31 of the protein  
 human lactoferrin

&lt;400&gt; 41

Trp Gln Arg Asn Met Arg Lys Val Arg  
 1 5

&lt;210&gt; 42

&lt;211&gt; 8

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence: Peptide of  
 natural or artificial origin consisting of the  
 amino acids in positions 24-31 of the protein  
 human lactoferrin

&lt;400&gt; 42

Gln Arg Asn Met Arg Lys Val Arg  
 1 5

&lt;210&gt; 43

&lt;211&gt; 11

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;221&gt; PEPTIDE

&lt;222&gt; (2)..(10)

<223> Amino acids 2, 4, 6 and 10 are Xaa wherein Xaa = Gln, Lys,  
 Asp, Asn or Val.

&lt;220&gt;

<223> Description of Artificial Sequence: of natural or  
 artificial origin, corresponding to a modification  
 of the sequence consisting of amino acids 21-31 in  
 human lactoferrin

&lt;400&gt; 43

Phe Xaa Trp Xaa Arg Xaa Met Arg Lys Xaa Arg  
 1 5 10

<210> 44  
 <211> 11  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: of natural or  
 artificial origin, corresponding to the sequence  
 consisting of amino acids 21-31 in human  
 lactoferrin

<400> 44  
 Phe Gln Trp Gln Arg Asn Met Arg Lys Val Arg  
     1                    5                    10

<210> 45  
 <211> 11  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: of natural or  
 artificial origin, corresponding to the sequence  
 consisting of aa 21-31 in human lactoferrin  
 wherein one aa has been substituted

<400> 45  
 Phe Gln Trp Gln Arg Asn Met Arg Lys Val Arg  
     1                    5                    10

<210> 46  
 <211> 12  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: of natural or  
 artificial origin, corresponding to the sequence  
 consisting of aa 20-31 in human lactoferrin  
 wherein one aa has been substituted

<400> 46  
 Cys Phe Gln Trp Gln Arg Asn Met Arg Lys Val Arg  
     1                    5                    10

<210> 47  
 <211> 12  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <221> MOD\_RES



<222> (1)  
 <223> ACETYLATION

<220>  
 <221> MOD\_RES  
 <222> (12)  
 <223> AMIDATION

<220>  
 <223> Description of Artificial Sequence: of natural or  
 artificial origin, corresponding to the sequence  
 consisting of aa 20-31 in human lactoferrin

<400> 47  
 Cys Phe Gln Trp Gln Arg Asn Met Arg Lys Val Arg  
   1                  5                  10

<210> 48  
 <211> 13  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: of natural or  
 artificial origin, corresponding to the sequence  
 consisting of aa 19-31 in human lactoferrin

<400> 48  
 Lys Cys Phe Gln Trp Gln Arg Asn Met Arg Lys Val Arg  
   1                  5                  10

<210> 49  
 <211> 13  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <221> MOD\_RES  
 <222> (1)  
 <223> ACETYLATION

<220>  
 <221> MOD\_RES  
 <222> (13)  
 <223> AMIDATION

<220>  
 <223> Description of Artificial Sequence: of natural or  
 artificial origin, corresponding to the sequence  
 consisting of aa 19-31 in human lactoferrin  
 wherein one aa has been modified

&lt;400&gt; 49

Lys Cys Phe Gln Trp Gln Arg Asn Met Arg Lys Val Arg  
 1 5 10

&lt;210&gt; 50

&lt;211&gt; 14

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence: of natural or  
 artificial origin, corresponding to the sequence  
 consisting of aa 18-31 in human lactoferrin

&lt;400&gt; 50

Thr Lys Cys Phe Gln Trp Gln Arg Asn Met Arg Lys Val Arg  
 1 5 10

&lt;210&gt; 51

&lt;211&gt; 14

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

&lt;221&gt; MOD\_RES

&lt;222&gt; (1)

&lt;223&gt; ACETYLTATION

&lt;220&gt;

&lt;221&gt; MOD\_RES

&lt;222&gt; (14)

&lt;223&gt; AMIDATION

&lt;220&gt;

<223> Description of Artificial Sequence: of natural or  
 artificial origin, corresponding to the sequence  
 consisting of aa 18-31 in human lactoferrin

&lt;400&gt; 51

Thr Lys Cys Phe Gln Trp Gln Arg Asn Met Arg Lys Val Arg  
 1 5 10

&lt;210&gt; 52

&lt;211&gt; 14

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence: of natural or  
 artificial origin, corresponding to a modification  
 of the sequence consisting of amino acids 18-31 in

## human lactoferrin

&lt;400&gt; 52

Thr Lys Ala Phe Lys Trp Gln Arg Asp Met Arg Lys Val Arg  
 1 5 10

&lt;210&gt; 53

&lt;211&gt; 14

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence: of natural or  
 artificial origin, corresponding to a modification  
 of the sequence consisting of amino acids 18-31 in  
 human lactoferrin

&lt;220&gt;

&lt;221&gt; MOD\_RES

&lt;222&gt; (1)

&lt;223&gt; ACETYLTATION

&lt;220&gt;

&lt;221&gt; MOD\_RES

&lt;222&gt; (14)

&lt;223&gt; AMIDATION

&lt;400&gt; 53

Thr Lys Ala Phe Lys Trp Gln Arg Glu Met Arg Lys Val Arg  
 1 5 10

&lt;210&gt; 54

&lt;211&gt; 14

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence: of natural or  
 artificial origin, corresponding to a modification  
 of the sequence consisting of aa 18-31 in human  
 lactoferrin; a lactam is formed between aa 5 and 9

&lt;220&gt;

&lt;221&gt; BINDING

&lt;222&gt; (5)..(9)

&lt;223&gt; LACTAM

&lt;400&gt; 54

Thr Lys Ala Phe Lys Trp Gln Arg Asp Met Arg Lys Val Arg  
 1 5 10

&lt;210&gt; 55

&lt;211&gt; 14

&lt;212&gt; PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: of natural or artificial origin, corresponding to a modification of the sequence consisting of aa 18-31 in human lactoferrin; a lactam is formed between aa 5 and 9

<220>

<221> MOD\_RES

<222> (1)

<223> ACETYLTATION

<220>

<221> MOD\_RES

<222> (14)

<223> AMIDATION

<220>

<221> BINDING

<222> (5)..(9)

<223> LACTAM

<400> 55

Thr Lys Ala Phe Lys Trp Gln Arg Glu Met Arg Lys Val Arg  
1 5 10

<210> 56

<211> 14

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: of natural or artificial origin, corresponding to a modification of the sequence consisting of amino acids 18-31 in human lactoferrin

<400> 56

Thr Lys Lys Phe Gln Trp Gln Arg Asn Met Arg Lys Val Arg  
1 5 10

<210> 57

<211> 14

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: of natural or artificial origin, corresponding to a modification of the sequence consisting of amino acids 18-31 in human lactoferrin

<220>

<221> MOD\_RES

<222> (1)

<223> ACETYLATION

<220>

<221> MOD\_RES

<222> (14)

<223> AMIDATION

<400> 57

Thr Lys Lys Phe Gln Trp Gln Arg Asn Met Arg Lys Val Arg  
1 5 10

<210> 58

<211> 14

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: of natural or artificial origin, corresponding to a modification of the sequence consisting of amino acids 18-31 in human lactoferrin

<400> 58

Thr Lys Lys Phe Gln Trp Asp Arg Lys Met Arg Lys Asp Arg  
1 5 10

<210> 59

<211> 14

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: of natural or artificial origin, corresponding to a modification of the sequence consisting of amino acids 18-31 in human lactoferrin

<220>

<221> MOD\_RES

<222> (1)

<223> ACETYLATION

<220>

<221> MOD\_RES

<222> (14)

<223> AMIDATION

<400> 59

Thr Lys Lys Phe Gln Trp Asp Arg Lys Met Arg Lys Asp Arg  
1 5 10

<210> 60

<211> 14

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: of natural or artificial origin, corresp. to a modification of the seq. consisting of aa 18-31 in human lactoferrin; lactams formed between aa 3 and 7, and 9 and 13

<220>

<221> BINDING

<222> (3)..(7)

<223> LACTAM

<220>

<221> BINDING

<222> (9)..(13)

<223> LACTAM

<400> 60

Thr Lys Lys Phe Gln Trp Asp Arg Lys Met Arg Lys Asp Arg  
1 5 10

<210> 61

<211> 14

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: of natural or artificial origin, corresp. to a modification of the seq. consisting of aa 18-31 in human lactoferrin; lactams formed between aa 3 and 7, and 9 and 13

<220>

<221> MOD\_RES

<222> (1)

<223> ACETYLTATION

<220>

<221> MOD\_RES

<222> (14)

<223> AMIDATION

<220>

<221> BINDING

<222> (3)..(7)

<223> LACTAM

<220>

<221> BINDING

<222> (9)..(13)

<223> LACTAM

<400> 61

Thr Lys Lys Phe Gln Trp Asp Arg Lys Met Arg Lys Asp Arg  
1 5 10

<210> 62  
 <211> 15  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: of natural or  
 artificial origin, corresponding to the sequence  
 consisting of amino acids 17-31 in human  
 lactoferrin

<400> 62  
 Ala Thr Lys Cys Phe Gln Trp Gln Arg Asn Met Arg Lys Val Arg  
           1                  5                  10                  15

<210> 63  
 <211> 15  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: of natural or  
 artificial origin, corresponding to a modification  
 of the sequence consisting of amino acids 17-31 in  
 human lactoferrin

<220>  
 <221> MOD\_RES  
 <222> (1)  
 <223> ACETYLTATION

<220>  
 <221> MOD\_RES  
 <222> (15)  
 <223> AMIDATION

<400> 63  
 Ala Thr Lys Cys Phe Gln Trp Gln Arg Asn Met Arg Lys Val Arg  
           1                  5                  10                  15

<210> 64  
 <211> 16  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: of natural or  
 artificial origin, corresponding to the sequence  
 consisting of amino acids 16-31 in human  
 lactoferrin

<400> 64  
 Glu Ala Thr Lys Cys Phe Gln Trp Gln Arg Asn Met Arg Lys Val Arg  
           1                  5                  10                  15

<210> 65  
 <211> 16  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: of natural or artificial origin, corresponding to a modification of the sequence consisting of amino acids 16-31 in human lactoferrin

<220>  
 <221> MOD\_RES  
 <222> (1)  
 <223> ACETYLATION

<220>  
 <221> MOD\_RES  
 <222> (16)  
 <223> AMIDATION

<400> 65  
 Glu Ala Thr Lys Cys Phe Gln Trp Gln Arg Asn Met Arg Lys Val Arg  
           1                  5                  10                  15

<210> 66  
 <211> 17  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: of natural or artificial origin, corresponding to the sequence consisting of amino acids 15-31 in human lactoferrin

<400> 66  
 Pro Glu Ala Thr Lys Cys Phe Gln Trp Gln Arg Asn Met Arg Lys Val  
           1                  5                  10                  15

Arg

<210> 67  
 <211> 17  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: of natural or artificial origin, corresponding to a modification of the sequence consisting of amino acids 15-31 in human lactoferrin

<220>  
 <221> MOD\_RES



<222> (1)  
 <223> ACETYLATION

<220>  
 <221> MOD\_RES  
 <222> (17)  
 <223> AMIDATION

<400> 67  
 Pro Glu Ala Thr Lys Cys Phe Gln Trp Gln Arg Asn Met Arg Lys Val  
           1                  5                  10                  15

Arg

<210> 68  
 <211> 12  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: of natural or  
           artificial origin; corresponding to the sequence  
           consisting of aa 20-31 in human lactoferrin  
           wherein one aa has been substituted

<400> 68  
 Ala Phe Gln Trp Gln Arg Asn Met Arg Lys Val Arg  
           1                  5                  10

<210> 69  
 <211> 12  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: of natural or  
           artificial origin, corresponding to the sequence  
           consisting of aa 20-31 in human lactoferrin  
           wherein one aa has been substituted

<400> 69  
 Cys Ala Gln Trp Gln Arg Asn Met Arg Lys Val Arg  
           1                  5                  10

<210> 70  
 <211> 12  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: of natural or  
           artificial origin, corresponding to the sequence  
           consisting of aa 20-31 in human lactoferrin

wherein one aa has been substituted

<400> 70

Cys Phe Ala Trp Gln Arg Asn Met Arg Lys Val Arg  
1 5 10

<210> 71

<211> 12

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: of natural or artificial origin, corresponding to the sequence consisting of aa 20-31 in human lactoferrin wherein one aa has been substituted

<400> 71

Cys Phe Gln Ala Gln Arg Asn Met Arg Lys Val Arg  
1 5 10

<210> 72

<211> 12

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: of natural or artificial origin, corresponding to the sequence consisting of aa 20-31 in human lactoferrin wherein one aa has been substituted

<400> 72

Cys Phe Gln Trp Ala Arg Asn Met Arg Lys Val Arg  
1 5 10

<210> 73

<211> 12

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: of natural or artificial origin, corresponding to the sequence consisting of aa 20-31 in human lactoferrin wherein one aa has been modified

<400> 73

Cys Phe Gln Trp Gln Ala Asn Met Arg Lys Val Arg  
1 5 10

<210> 74

<211> 12  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: of natural or  
 artificial origin, corresponding to the sequence  
 consisting of aa 20-31 in human lactoferrin  
 wherein one aa has been substituted

<400> 74  
 Cys Phe Gln Trp Gln Arg Ala Met Arg Lys Val Arg  
     1                    5                    10

<210> 75  
 <211> 12  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: of natural or  
 artificial origin, corresponding to the sequence  
 consisting of aa 20-31 in human lactoferrin  
 wherein one aa has been substituted

<400> 75  
 Cys Phe Gln Trp Gln Arg Asn Ala Arg Lys Val Arg  
     1                    5                    10

<210> 76  
 <211> 12  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: of natural or  
 artificial origin, corresponding to the sequence  
 consisting of aa 20-31 in human lactoferrin  
 wherein one aa has been substituted

<400> 76  
 Cys Phe Gln Trp Gln Arg Asn Met Ala Lys Val Arg  
     1                    5                    10

<210> 77  
 <211> 12  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: of natural or  
 artificial origin, corresponding to the sequence  
 consisting of aa 20-31 in human lactoferrin  
 wherein one aa has been substituted

<400> 77  
 Cys Phe Gln Trp Gln Arg Asn Met Arg Ala Val Arg  
   1                  5                  10

<210> 78  
 <211> 12  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: of natural or  
 artificial origin, corresponding to the sequence  
 consisting of aa 20-31 in human lactoferrin  
 wherein one aa has been substituted

<400> 78  
 Cys Phe Gln Trp Gln Arg Asn Met Arg Lys Ala Arg  
   1                  5                  10

<210> 79  
 <211> 12  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: of natural or  
 artificial origin, corresponding to the sequence  
 consisting of aa 20-31 in human lactoferrin  
 wherein one aa has been substituted

<400> 79  
 Cys Phe Gln Trp Gln Arg Asn Met Arg Lys Val Ala  
   1                  5                  10

<210> 80  
 <211> 12  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: of natural or  
 artificial origin, corresponding to the sequence  
 consisting of aa 20-31 in human lactoferrin  
 wherein one aa has been substituted

<400> 80  
 Cys Phe Gln Leu Gln Arg Asn Met Arg Lys Val Arg  
   1                  5                  10

<210> 81  
 <211> 12  
 <212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: of natural or artificial origin, corresponding to the sequence consisting of aa 20-31 in human lactoferrin wherein one aa has been substituted

<400> 81

Cys Phe Gln Trp Gln Lys Asn Met Arg Lys Val Arg  
1 5 10

<210> 82

<211> 12

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: of natural or artificial origin, corresponding to the sequence consisting of aa 20-31 in human lactoferrin wherein one aa has been substituted

<400> 82

Cys Phe Gln Trp Gln Arg Asn Leu Arg Lys Val Arg  
1 5 10

<210> 83

<211> 12

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: of natural or artificial origin, corresponding to the sequence consisting of aa 20-31 in human lactoferrin wherein one aa has been substituted

<400> 83

Cys Phe Gln Trp Gln Arg Asn Met Lys Lys Val Arg  
1 5 10

<210> 84

<211> 12

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: of natural or artificial origin, corresponding to the sequence consisting of aa 20-31 in human lactoferrin wherein one aa has been substituted

<400> 84

Cys Phe Gln Trp Glu Arg Asn Met Arg Lys Val Arg  
 1 5 10

<210> 85  
 <211> 12  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: of natural or  
 artificial origin, corresponding to the sequence  
 consisting of aa 20-31 in human lactoferrin  
 wherein one aa has been substituted

<400> 85  
 Cys Phe Gln Trp Gln Glu Asn Met Arg Lys Val Arg  
 1 5 10

<210> 86  
 <211> 12  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: of natural or  
 artificial origin, corresponding to the sequence  
 consisting of aa 20-31 in human lactoferrin  
 wherein one aa has been substituted

<400> 86  
 Cys Phe Gln Trp Gln Arg Glu Met Arg Lys Val Arg  
 1 5 10

<210> 87  
 <211> 12  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: of natural or  
 artificial origin, corresponding to the sequence  
 consisting of aa 20-31 in human lactoferrin  
 wherein one aa has been substituted

<220>  
 <221> MISC\_FEATURE  
 <222> (5)  
 <223> Amino acid 5 is Xaa wherein Xaa = Orn.

<400> 87  
 Cys Phe Gln Trp Xaa Arg Asn Met Arg Lys Val Arg  
 1 5 10

<210> 88  
 <211> 12  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: of natural or artificial origin, corresponding to the sequence consisting of aa 20-31 in human lactoferrin wherein one aa has been substituted

<220>  
 <221> MISC\_FEATURE  
 <222> (5)  
 <223> Amino acid 5 is Xaa wherein Xaa = Nle.

<400> 88  
 Cys Phe Gln Trp Xaa Arg Asn Met Arg Lys Val Arg  
   1                  5                  10

<210> 89  
 <211> 12  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: of natural or artificial origin, corresponding to the sequence consisting of aa 20-31 in human lactoferrin wherein one aa has been substituted

<220>  
 <221> MISC\_FEATURE  
 <222> (7)  
 <223> Amino acid 7 is Xaa wherein Xaa = Orn.

<400> 89  
 Cys Phe Gln Trp Gln Arg Xaa Met Arg Lys Val Arg  
   1                  5                  10

<210> 90  
 <211> 12  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence: of natural or artificial origin, corresponding to the sequence consisting of aa 20-31 in human lactoferrin wherein one aa has been substituted

<220>  
 <221> MISC\_FEATURE

<222> (7)

<223> Amino acid 7 is Xaa wherein Xaa = Nle.

<400> 90

Cys Phe Gln Trp Gln Arg Xaa Met Arg Lys Val Arg  
1 5 10

<210> 91

<211> 12

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: of natural or artificial origin, corresponding to the sequence consisting of aa 20-31 in human lactoferrin wherein one aa has been substituted

<400> 91

Cys Phe Gln Trp Lys Arg Asn Met Arg Lys Val Arg  
1 5 10

<210> 92

<211> 12

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: of natural or artificial origin, corresp. to a modification of the sequence consisting of aa 20-31 in human lactoferrin

<220>

<221> MOD\_RES

<222> (1)

<223> ACETYLATION

<220>

<221> MOD\_RES

<222> (12)

<223> AMIDATION

<400> 92

Cys Phe Gln Trp Lys Arg Asn Met Arg Lys Val Arg  
1 5 10

<210> 93

<211> 12

<212> PRT

<213> Artificial Sequence



&lt;220&gt;

<223> Description of Artificial Sequence: of natural or artificial origin, corresponding to the sequence consisting of aa 20-31 in human lactoferrin wherein some aa have been substituted

&lt;400&gt; 93

Cys Phe Gln Trp Lys Arg Ala Met Arg Lys Val Arg  
 1 5 10

&lt;210&gt; 94

&lt;211&gt; 12

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence: of natural or artificial origin, corresponding to the sequence consisting of aa 20-31 in human lactoferrin wherein some aa have been substituted

&lt;400&gt; 94

Cys Phe Ala Trp Lys Arg Asn Met Arg Lys Val Arg  
 1 5 10

&lt;210&gt; 95

&lt;211&gt; 12

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence: of natural or artificial origin, corresponding to the sequence consisting of aa 20-31 in human lactoferrin wherein some aa have been substituted

&lt;400&gt; 95

Cys Phe Ala Trp Gln Arg Ala Met Arg Lys Val Arg  
 1 5 10

&lt;210&gt; 96

&lt;211&gt; 12

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence: of natural or artificial origin, corresponding to the sequence consisting of aa 20-31 in human lactoferrin wherein some aa have been substituted

&lt;400&gt; 96

Cys Phe Gln Leu Lys Lys Asn Met Lys Lys Val Arg  
 1 5 10